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PORIFERA

COMPILED BY
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3. PORIFERA

BY

M. BURTON, D.Sc.

I.—TITLES

The year of publication of a title is omitted from the reference where it is the same as the volume year of the "Record," namely (1958).

Albahary, C. and Budker, P. Dangers des animaux aquatiques. Encyclopédie Médico-Chirurgicale 16078 C10. Paris 1958: pp. 9, text illust.

Amsden, T. W. Catalog of fossils from the Middle and Upper Ordovician of Oklahoma. Circ. Okla. geol. Surv. 43 1957: 1–41.

Ancellin, J. Observations sur la faune et les fonds de pêche de quelques secteurs de la manche et des mers nordiques. Rev. Trav. Inst. Pêches marit. 21 (4) 1957: 449-484.

(Bologhdin, A. G.) [Arkhestziatui i ikh stratighraficheskoe Zuachenie.] Acta palaeont. Sinica 5 (2) 1957: 173–222, 22 pls. [In Chinese with Russian summary.]

Borradaile, L. A. and others. The Invertebrata. A manual for the use of students. 3rd edition. Cambridge (Univ. Press) 1958, pp. xvii+795, 523 figs.

Bouillon, J. see Rasmont, R.

Brien, P. and Govaert-Mallebrancke, D. A propos de deux éponges du Tanganyika. Mém. Acad. Sci. colon. Bruxelles 8° Cl. Sci. nat. méd. N.S. 8 (1) 1958: 1-47 4 pls., 19 figs.

Budker, P. see Albahary, G.

Burton, M. Porifera. Hanström et al. South African Animal Life 5 Stockholm, 1958: 9.

Burton, M. (1). The sponges of West Africa. Atlantide Rep. No. 4 1956: 111-147, 4 figs.

Castiaux, P. see Rasmont, R.

Colussi, A. Sulla degenerazione di ovociti in Sycon raphanus (O. Schmidt) (Calcispongiae). Annu. Ist. Zool. Univ. Napoli 10 (1) 1958: 1-6 1 pl.

Czihak, G. Morphologie und Entwicklungsgeschichte der Wirbellosen. Porifera. Fortschr. Zool. 11 1958: 15–34 12 figs.

Debrenne, F. Sur un représentant de la famille des *Syringocnematidae* de la région d'Alanis (Espagne). C.R. Soc. géol. Fr. **1958** (3-4): 58-59 figs.

de Laubenfels, M. W. Nomenclature of Porifera, especially concerning the so-called "glass sponges" or Hyalospongea. J. Paleont. 32 (3) 1958: 611-616.

Dudich, E. Die Grundlagen der Fauna eines Karpaten-Flusses. Acta zool., Budapest 3 (3-4) 1958: 179-200.

Germaine, L. A. P. La faune des lacs, des étangs et des marais de l'Europe occidentale. 2me édition revisée . . . par E. Séguy. Encyclopédie pratique du naturaliste, Tome XX. Paris (Editions Paul Lechevalier) 1957: pp. 89–92 text illust.

Govaert-Mallebrancke, see Brian P. Greggs, R. G. see Okulitch, V. J.

Henningsmoen, G. The Upper Cambrian faunas of Norway, with descriptions of non-olenid invertebrate fossils. Norsk geol. Tidsskr. 38 (2) 1958: 179-196 7 pls. (Ilin, A. V.) [On Pre-Cambrian and Cambrian of the hillside of Sangilen (Tuva).] Bull. Soc. Nat. Moscou geol. 33 (1) 1958: 37-41.

Jones, W. C. The effect of reversing the internal water-current on the spicule orientation in *Leucosolenia variabilis* and *L. complicata*. Quart. J. micr. Sci. **99** 2 1958: 263-278 8 figs. [See also Rep. Challenger Soc. **3** (9) 1957: 24.]

Jones, W. C. see Knight-Jones, E. W.

Kawase, Y. and Okulitch, V. J. Archaeocyatha from the Lower Cambrian of the Yukon Territory. J. Paleont. 31 (5) 1957: 913-930 5 pls.

(Koltun, V. M.) [Cornacuspongia of sea waters washing the South Sakhalin and the South Kurile Islands region.] Issled. dalnevost. Mor. S.S.S.R. 5 1958: 42-77 25 figs. [In Russian.]

Lagneau-Hérenger, L. Prostolleya cylindrata, nouvelle éponge silicense fossile et révision de la classification des Tetractinellida. Trav. Lab. Géol. Univ. Grenoble 30 1953: 31-35 figs.

Lagneau-Hérenger, L. (1). Note préliminaire à l'étude des Spongiaires siliceux du Crétacé supérieur d'Egypte. Trav. Lab. Géol. Univ. Grenoble 30 1953: 123–126, 2 pls. figs.

Lefevere, S., Leloup, E. and Meel, L. van. Observations biologiques dans le Port d'Ostende. Mém. Inst. Sci. nat. Belg. No. 133 1956: 1-157 3 pls.

Leloup, E. see Lefevere, S.

Lévi, C. Les Clavaxinellides. (Démosponges Tétractinomorphes.). Arch. Zool. exp. gén. **92** Notes et Rev. 1955 : 78–87.

Lévi, C. (1). Résultats scientifiques des campagnes de la Calypso. Campagne 1951–1952 en Mer Rouge. Spongiaires de Mer Rouge recueillis par la Calypso (1951–1952). Ann. Inst. Océanogr. Paris N.S. 34 1958: 3–46 37 figs.

Lévi, C. see Vacelet, J.

Light, S. F. Intertidal invertebrates of the central California coast. Berkeley (University of California Press) 1954: pp. xiv, 446 138 figs.

Lutfy, R. G. On the relation between dictyosome and contractile 576, 38 vacuole in sponges. J. roy. micr. Soc. (3) 76 (4) 1958: 141–145 1 pl. 5 figs.

Meel, L. van see Lefevere, S.

Minchen, M. C. A new Clionalike sponge from the Devonian of Hunan. Acta paleont. Sinica 5 1957: 63-68 figs. [English summary p. 68.]

Moura, A. Espongilideos fosseis no diatomito de Azenhas do Vale de Atela (Alpiarça). Mem. mus. min. geol. Univ. Coimbra 46 1958: 23-33, 2 pls.

Newell, G. E. The marine fauna of Whitstable. Ann. Mag. nat. Hist. (12) 7 1954: 322-350.

Okulitch, V. J. and Greggs, R. G. Archaeocyathid localities in Washington, British Columbia, and the Yukon Territory. J. Paleont. 32 (3) 1958: 617-623.

Okulitch, V. J. see Kawase, Y.

Palik, P. Kieselalgen-und Spongienreste aus dem "gelben" Pannonsand von Bogáes. Földt. Közl. 88 (1) 1958: 83–100, 9 pls. [Hungarian with German summary.]

Paschma, M. On the nervous system of Porifera. Przegl. Zool. 2 (2) 1958: 114–125 9 figs.

Pavans de Ceccatty, M. La mélanisation chez quelques Éponges calcaires et siliceuses : ses rapports avec le système reticulo-histiocytaire. Arch. Zool. exp. gén. 96 (1) 1958 : 1–52 1 pl.

Pokorný, V. Grundzüge der Zoologischen Mikropaläontologie. Band 2. Berlin 1958: 1–29 14 figs.

Poulsen, V. Contributions to the Middle Cambrian paleontology and stratigraphy of Argentina. Mat. Fys. Medd. Dan. vid. Selsk. 31 (8) 1958: 1–22 l pl. [Reprinted in Comm. Pal. Mus. Min. geol. Univ. Copenhague No. 103.]

Rasmont, R. Les éponges d'eau donce. II. Leur élévage. Nat. Belges 39 1958: 19–25 3 figs. Rasmont, R., Bouillon, J., Castiaux, P. and Vandermeerssche, G. Ultrastructure of the choanocyte collarcells in freshwater sponges. Nature, Lond. 181 (4601) 1958: 58-59 2 figs.

Reid, R. E. H. On the Gelatinosa and Nuda of Bidder. Ann. Mag. nat. Hist. (12) 8 1955: 721-723.

Reid, R. E. H. (1). On Hexactinellida, "Hyalospongea," and the classification of Siliceous Sponges.
J. Paleont. 31 (1) 1957: 282–286.

Reid, R. E. H. (2). Notes on Hexactinellid sponges—1. Euryplegma F. E. Schulze. Ann. Mag. nat. Hist. (12) 9 1957: 907–909.

Reid, R. E. H. (3). Notes on Hexactinellid sponges—II. Dactylocalyx Stutchbury and the family Dactylocalycidae Gray. Ann. Mag. nat. Hist., Ser. 12 10 (119) 1957 (1958): 821–826.

Reid, R. E. H. (4). A use for acetic acid in the study of fossil sponges. Geol. Mag. 95 1958: 82–83.

Reid, R. E. H. (5). Remarks on the upper Cretaceous Hexactinellida of County Antrim: Parts I–II. Irish Nats. J. 12 (9–10) 1958: 236–243, 261–269.

Reid, R. E. H. (6). A monograph of the Upper Cretaceous Hexactinellida of Great Britain and Northern Ireland. Parts I-II. Palaeontogr. Soc. [Monogr.] vol. for 1957. 1958: i-xlviii 1-26 figs and pls.

Ricé, N. E. Occurrence of glass sponges in the Devonian of West Virginia. J. Paleont. 32 1958: 244–245.

Rich, C. C. Occurrence of Sterrasters of the Geodiidae (Desmospongea, Choristida) in late Cenozoic Strata of Western Wellington Province, New Zealand. N.Z. J. geol. geophys. 1 (4) 1958: 641-646 figs.

Rossi, L. Contributa alla studio della fauna di profondita' vivente presso la Riviera Ligure de Levante. Doriana 2 (92) 1958: 1-13.

Saper, J. and White, W. E. Amino-acid composition of selero-protein of the sponge *Hippospongia equina*. Nature, Lond. **181** (4614) 1958: 285–286.

Sawyer, F. C. Books of reference in zoology, chiefly bibliographical. J. Soc. Bibl. nat. Hist. 3 1955: 72-91.

Schechter, V. The life of a sponge, Biol. Rev. City Coll. N.Y. 15 (1) 1953: 26-28.

Schön, A. Massenentwicklung von Schwämmen an Rheinkraftwerken. Z. Fisch. 6 (1-7) 1957: 85-86 1 fig.

Shaw, A. B. Paleontology of Northwestern Vermout. VI. The Early Middle Cambrian Fauna. J. Paleont. 31 1957: 785–792 2 pls.

Stumm, E. C. and Wright, J. D. Check list of fossil intertebrates described from the Middle Devonian rocks of the Thedford-Arkona region of South Western Ontario. Contr. Mus. Pal. Univ. Mich. 14. (7) 1958: 97.

Tierney, J. Q. The porifera of the Gulf of Mexico. Fish. Bull. U.S. 55 1954: 259-261.

Trégouboff, G. Porifera (Spongiaires) in Trégouboff, G. and Rose, M. Manual de planctonologie méditerranéenne. Paris (Centre National de la Recherche Scientifique) 1957. Vol. I: 259–262; vol. II: pl. 61.

Utinomi, H. Coloured illustrations of sea-shore animals of Japan. Osaka (Hoikusha) 1956 pp. [2] xvii, 167: 76 [64 col.] pls., text figs. Japanese [Fauna and flora of Japan, No. 8]: 1–2, 1 pl.

Vacelet, J. Dendrilla acantha nov. sp., nouvelle éponge cornée Méditerranéenne. Remarques sur les genres Dendrilla Lindenfeld et Megalopastas Dendy. Rec. Trav. Sta. mar. Endoume 23 1958: 143–147 2 figs.

Vacelet, J. and Lévi, C. Un cas de survivance, en Méditerrannée, du groupe d'éponges fossiles des Pharétronides. C.R. Acad. Sci. Paris 246 (2) 1958: 318-320 3 figs.

Vandermeerssche, G. see Rasmont, R.

Wanless, H. R. Pennsylvanian faunas of the Beardstown, Glasford, Havana, and Vermont Quadrangles. Rep. Invest. Ill. geol. Surv. 205 1958: 1-59, figs.

Warburton, F. E. Reproduction of fused larvae in the boring sponge, *Cliona celata* Grant. Nature, Lond. **181** (4607) 1958: 493-494.

Warburton, F. E. (1). Boring sponges, Cliona species, of Eastern Canada, with a note on the validity of C. lobata. Canad. J. Zool. 36 (2) 1958: 123-125.

Warburton, F. E. (2). The manner in which the sponge *Cliona* bores in calcareous objects. Canad. J. Zool. 36 (4) 1958: 555-562 10 figs.

Watanabe, Y. Development of Tethya serica Lebwohl, a tetraxonian sponge. I. Observations on external changes. Nat. Sci. Rep. Ochanomizu Univ. 8 (2) 1957: 97-104 3 figs.

White, W. E. see Saper, J.

Wolfenden, E. B. Paleoecology of the Carboniferous reef complex and shelf limestones in northwest Derbyshire, England. Bull. geol. Soc. Amer. 69 (7) 1958: 886.

Wright, J. D. see Stumm, E. C.

II.—SUBJECT INDEX

References to the "Titles" are by the name(s) of the Author(s).

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DISTRIBUTION MARINE

British Isles.—Newall, G. E.

Belgium.—Lefevere, S., Leloup, E. and Meel, L. van.

Norway.—Ancellin, J.

Mediterranean.—Rossi, L.; Vacelet, J.; Vacelet, J. and Lévi, C.

West Africa.—Burton, M. (2).

Red Sea.—Lévi. C. (1).

G. of Mexico.—Tierney, J. Q.

Canada.—Warburton, F. E. (1).

California.—Light, S. F.

Japan.-Utinomi, H.

N.W. Pacific.-Koltun, V. M.

FRESHWATER

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Germany.—Schön, A.

Hungary.—Dudich, E.

Tanganyika.—Brien, P. and Govaert-Mallebrancke, D.

S. Africa.—Burton, M.

FOSSIL

Micropalaeontology.—Pokorný, V.

Primary.—Cambrian, Henningsmoen, G., Kawase, Y. and Okulitch, V. J., Okulitch, V. J. and Greggs, R. G., Poulsen, V., Shaw, A. B.; Ordovician, Amsden, T. W.; Devonian, Minchen, M. C., Rice, N. E., Stumm, E. C. and Wright, J. D.; Carboniferous, Wanless, H. R., Wolfenden, E. B.

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†Coscinocyathus multiporus: 917, pl. cix, figs. 7-9, cassiariensis: 917, pl. cix, figs. 10-13, inequivallus: 918, pl. cx, figs. 1-6, serratus: 920, pl. cx, figs. 7-9, veronicus: 920, pl. cx, figs. 8, tubicornus: 921, pl. cx, figs. 10-11 spp. n. Cambrian N. America, Kawase, Y. and Okulitch, V. J.

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†Pycnoidocyathus solidus sp. n. Cambrian N. America, Kawase, Y. and Okulitch, V. J.: 925, pl. cxii, figs. 8-9.